DETAILED ACTION

1. Claims 8-12, 19-22 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 8-12, 19-22, rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A 'data structure' comprising: a first block for... ; a second block for...." is non-statutory for at least the reason that it is not tangibly embodied in a manner so as to be executable. Further, a collection of fields, *per se*, is not an actual data structure, instead being non-functional descriptive material. Thus rejections under §101 as being an **abstract idea** and under §112, 2nd para, as **lacking an essential element** may also be appropriate.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

(a) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8-12, 19-22are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

A)   The following claim language is not clearly define:

a) As per claims 8,10,12, and 19, it is unclear what EEC data structure is and how

it is different from the ECC block? Also an unabbreviated EEC needs to be

included in independent claims.

b) Claims 8,10,12, and 19 rejected under 35 U.S.C. 112, second paragraph, as

being incomplete for omitting essential elements, such omission amounting to a

gap between the elements. See MPEP § 2172.01. The omitted elements are: the

data structure and blocks of data.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
in section 102 of this title, if the differences between the subject matter sought to be patented and the
prior art are such that the subject matter as a whole would have been obvious at the time the invention
was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability
shall not be negatived by the manner in which the invention was made.

7. Claims 8-12, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim

(5,627,935) in view of Oeda et al (6,125,427) (hereinafter Oeda).

8. As per claim 8, Kim teaches an optical disc having a data format, comprising: a first ECC

data structure including at least a user data and control information disposed in a first

ECC block (col.6 lines 1-9); and

a second ECC data structure including at least an ID information of a physical sector

disposed in a second ECC block(col.6 lines 1-9); wherein the first and the second blocks

are expressed on the disc in a same physical data cluster (col. 6 lines 19-39).

9. Kim does not specifically teach the use of independently coded blocks.

Oeda teaches wherein the first and second ECC blocks are coded independently for error

correction (col. 7 lines 55-67; col. 8 lines 1-9). It would have been obvious to one skilled

in the art at the time of the invention to combine the teachings of Kim and Oeda because

Kim's use of independently coded blocks within the error code would improve Oeda's

system by providing more user information during error correction.

10. As per claim 9, Oeda teaches a optical disc wherein the logical data format comprises an

error-correcting code having a long distance code (LDC) in one direction; and the user

data is arranged in a same direction as the error-correcting code (fig 4, element 50; col. 5

lines 50-57; col.6 lines 14-25).

11. Claims 10-11 are rejected based on the same rejections as claims 8-9 above.

12. Claims 12 and 19 are rejected based on the same rejection as claim 8 above.

13. As per claim 20 Kim teaches an optical disc wherein the ID information of the second

ECC block is (col.6 lines 1-9) operative to synchronize and address physical sectors of

the same physical data cluster (col. 6 lines 19-39).

14. As per claim 21 Kim teaches an optical disc wherein the ID information (col.6 lines 1-9)

is operative to synchronize and address physical sectors of the same physical data cluster

(col. 6 lines 19-39).

15. Claim 22 is rejected based on the same rejection as claim 20 above.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Itoi (6,477,313 teaches the use of independent ECC blocks (col. 14 lines 20-

25); Kulakowski et al (5,233,584) teache the use of different ECC data blocks each coded

independently (col. 4 line 59 –col.5 line 20).

17. Applicant's arguments with respect to claims 8-12, 19-22 have been considered but are moot in view of the new ground(s) of rejection.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh Shah whose telephone number is (571)272-3771. The examiner can normally be reached on 9-5.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

                                        Nilesh Shah
                                        Examiner
                                        Art Unit 2127

NS
January 12, 2005

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